

## CLAIMS:

1. A gas discharge lamp for EUV radiation with an anode (1) and a hollow cathode (2), wherein the hollow cathode (2) has at least two openings (3, 3') and the anode (1) has a through opening (4), characterized in that the longitudinal axes (5, 5') of the hollow cathode openings (3) have a common point of intersection S which lies on the axis of symmetry (6) of the anode opening (4).  
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2. A gas discharge lamp as claimed in claim 1, characterized in that the longitudinal axis (5) of each hollow cathode opening (3) is substantially perpendicular to the portion of the hollow cathode wall (7) situated opposite the respective hollow cathode opening (3).  
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3. A gas discharge lamp as claimed in claim 1 or 2, characterized in that each hollow cathode opening (3) is associated with a separate hollow cathode space (8).
4. A gas discharge lamp as claimed in any one of the claims 1 to 3, characterized in that a hollow cathode opening is formed as a blind hole.  
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5. A gas discharge lamp as claimed in claim 4, characterized in that the hollow cathode opening (3) present on the axis of symmetry (6) is formed as a blind hole.
- 20 6. A gas discharge lamp as claimed in any one of the claims 1 to 3, characterized in that the hollow cathode (2) has no opening (3) on the axis of symmetry (6) of the anode opening (4).
- 25 7. A gas discharge lamp as claimed in any one of the claims 1 to 4, characterized in that the hollow cathode (2) has a through hole on the axis of symmetry (6) of the anode opening (4), the diameter of said through hole being smaller than the diameter of the other hollow cathode openings.

8. A gas discharge lamp as claimed in any one of the claims 1 to 7, characterized in that the anode (1) has additional openings (4', 4'') whose longitudinal axes (9', 9'') each coincide with the longitudinal axis of a respective hollow cathode opening.

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9. A gas discharge lamp as claimed in claim 8, characterized in that, viewed from the point of intersection S, the spatial region behind the additional anode opening (4', 4'') is closed.

10 10. A gas discharge lamp as claimed in claim 8 or 9, characterized in that an additional anode opening (4', 4'') is formed as a blind hole.

11. A gas discharge lamp as claimed in any one of the claims 8, 9, and 10, characterized in that the central through hole of the anode (4) is formed as a grid whose open  
15 regions are strip-shaped or in the form of a checkerboard.

12. A gas discharge lamp as claimed in any one of the claims 1 to 11, characterized in that trigger devices (10) are provided for the hollow cathode space or spaces (8), preferably an additional electrode, a dielectric trigger, a pulsed high-frequency source, one or several glow  
20 discharge units, or a pulsed laser beam source.

13. A gas discharge lamp as claimed in any one of the claims 1 to 12, characterized in that a double plasma arrangement with an auxiliary anode (17) is provided as the trigger device.